

Notice of Allowability

Application No.

10/769,583

Examiner

Dieu-Minh Le

Applicant(s)

GOLASKY ET AL.

Art Unit

2114

MB

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the communication filed 4/18/07 and interview on 5/25/07 & 6/4/07.
2. The allowed claim(s) is/are 1-21.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some* - c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

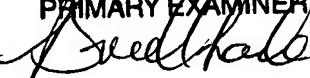
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DIEU-MINH LE
PRIMARY EXAMINER


1. This office action is in response to the communication filed 04/18/07 and Interview on 05/25/2007 and 06/04/2007.
2. Claims 1-21 are allowable over the prior art of record.
3. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

EXAMINER'S AMENDMENT:

IN THE CLAIMS:

Please replace all prior versions of claims in the application with the current listing claims in the **ATTACHMENT:**

4. Authorization for this Examiner's Amendment was given in a telephone interview with Ms. Paula D. Heyman, Registration No. 48,363 on 05/25/2007 and 06/04/2007.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The Tech Center 2100 phone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2114

DML.
06/06/2007

ATTACHMENT:

LISTING OF CLAIMS:

1. **(Currently Amended)** A method for recovering from a failure event on a communication path between an information handling system and a sequential storage device, comprising:
 - monitoring the communication path during an information data exchange for a failure event;
 - in response to detection of a failure event, **indicating using an identifier to indicate** a location in the information data exchange at which the failure event occurred; and
 - initiating a continuation of the information data exchange from the location of failure on a fail-over communication path between the information handling system and the sequential storage device.
2. **(Previously Presented)** The method of Claim 1, further comprising indicating the location of failure in a host bus adapter of the information handling system.
3. **(Previously Presented)** The method of Claim 1, further comprising indicating the location of failure in the sequential storage device.
4. **(Previously Presented)** The method of Claim 1, further comprising communicating the location of failure to a fail over host bus adapter on the information handling system using a support driver.

5. (Currently Amended) The method of Claim 1, ~~further comprising including wherein the identifier comprises at least one of~~ an originator exchange identifier, a receiver exchange identifier and a port identifier ~~in the indicating of the location of failure.~~

6. (Currently Amended) The method of Claim 1, further comprising querying the sequential storage device by the information handling system for identification of its indicating the location of failure.

7. (Previously Presented) The method of Claim 6, further comprising initiating continuation of the information data exchange based on sequential storage device query results.

8. (Previously Presented) The method of Claim 1, further comprising passing a pointer to a buffer including contents of the information data exchange from a host bus adapter associated with the failed communication path to a fail over host bus adapter associated with a fail over communication path.

9. (Currently Amended) Software for completing a transaction between a sequential storage device and a host information handling system after a failure event on a communication path between the sequential storage device and the host information handling system, the software embodied in computer readable media and when executed operable to:

detect a failure event on the communication path;
retain information concerning at least one open exchange being communicated on the communication path;

retrieve an exchange status indicating using an identifier to indicate a location in the information data exchange at which the failure event occurred; and

continue communication of the exchange based on the exchange status on a fail over path between the host information handling system and the sequential storage device.

10. (Previously Presented) The software of Claim 9, further operable to query the sequential storage device for the exchange status indicating the location in the information data exchange at which the failure event occurred.

11. (Original) The software of Claim 9, further operable to:

read open exchange information from a host bus adapter associated with the failed communication path; and

communicate the open exchange information to a host bus adapter associated with the fail over communication path.

12. (Original) The software of Claim 9, further operable to monitor continued communication of the exchange for an acknowledgment of exchange completion.

13. (Original) The software of Claim 9, further operable to buffer data received in the exchange communication at the sequential storage device.

14. (Original) The software of Claim 9, further operable to retain information concerning at least one open exchange on

the host information handling system and the sequential storage device.

15. (Currently Amended) An information handling system, comprising:

at least one processor;

a memory operably coupled to the processor;

at least one communication device operably coupled to the processor and the memory, the communication device operable to communicate data on at least one communication path; and

a program of instructions storable in the memory and executable by the processor, the program of instructions operable to use an identifier to indicate a location of failure in an information data exchange with a sequential storage device in response to a communication path failure and facilitate communication of the information data exchange with the sequential storage device from the location of failure on a fail over communication path.

16. (Previously Presented) The information handling system of Claim 15, further comprising the program of instructions operable to respond to a query concerning the information data exchange location of failure.

17. (Previously Presented) The information handling system of Claim 15, further comprising the program of instructions operable to query the sequential storage device to identify the information data exchange location of failure.

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18. (Previously Presented) The information handling system of Claim 15, further comprising the program of instructions operable to communicate data concerning the information data exchange to communication hardware associated with the fail over communication path.

19. (Currently Amended) The information handling system of Claim 15, ~~further comprising the program of instructions operable to include wherein the identifier includes~~ at least one of an originator exchange identifier, [[and]] a receiver exchange identifier and a port identifier indicating the location of failure of the information data exchange.

20. (Original) The information handling system of Claim 15, further comprising:

a first host bus adapter operable to communicate with the sequential storage device along a first communication path;

a second host bus adapter operable to communicate with the sequential storage device along a second communication path; and

at least one host bus adapter operable to retain an exchange state for at least one open exchange being communicated on an associated communication path.

21. (Previously Presented) The information handling system of Claim 15, further comprising:

a fibre channel interface module operable to receive at least one information data_exchange on a communication path; and

the fibre channel interface module operable to retain an exchange state for at least one open exchange communicated on the communication path.